

Notice of Allowability

Application No.

10/511,992

Examiner

Olga Asinovsky

Applicant(s)

HANDLIN ET AL.

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/22/2007.
2. ☒ The allowed claim(s) is/are 17-19,21,23-25 and 30-32.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/22/2006 has been entered.

Applicants amend claim 1 by including physical properties of the resulting hot melt adhesive wherein the specified physical properties are benefit of the claimed block copolymer B having a controlled distribution of at least one conjugated diene and at least one mono alkenyl arene, and wherein the block B has styrene blockiness index in the range of less than 40 percent. The new claims 30-33 are added by the present amendment.

New IDS filed in the present application.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

The claimed invention is a hot melt adhesive comprising: (a) a block copolymer having at least one A block of a mono alkenyl arene polymer and at least one B block that is a controlled distribution copolymer block of at least one conjugated diene and at least one mono alkenyl arene, wherein each A block and each B block have specified average molecular weight in section (ii), and each B block comprises terminal regions adjacent to the A block that are reach in conjugated diene units and one or more regions not

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adjacent to the A blocks that are rich in mono alkenyl arene units in section (iii); and wherein the styrene blockiness index of the block B is less than 40 percent, said styrene blockiness index being the proportion of styrene units in the block B having two styrene neighbors on the polymer chains; and wherein the block copolymer has a Young's modulus below 25% elongation of less than 20 Mpa and a rubber modulus or slope between 100 and 300% elongation of greater than 0.5 Mpa. The hot melt adhesive comprises (b) a hydrogenated hydrocarbon tackifying resin; (c) a resin compatible with the mono alkenyl arene blocks; and (e) stabilizers and/or additional auxiliaries.

Upon reconsideration of the evidence of record together with the present amendment and applicants' remarks, the rejection of claims 17-19 and 21-25 under 35 U.S.C.

103(a) over Trepka et al (patent 6,265,485) in view of Knoll et al (Patent 6,197,889) and further in view of Himes (Patent 5,759,622) is withdrawn, because none of the cited references discloses control of the distribution of monovinyl aromatic monomer to conjugated diene with a low styrene blockiness index of the block B, wherein these characteristics are the benefit for obtaining the specified physical properties of the resulting adhesive.

3. Meanwhile, the new search has been made. The new reference Patent 6,987,142 to St. Clair discloses an adhesive composition comprising a hydrogenated block copolymer having at least one polymer block A comprising a mono alkenyl arene homopolymer block and at least one polymer block B formed from a controlled distribution copolymer block of at least one conjugated diene and at least one mono

alkenyl arene. The difference is that Patent 6,987,142 discloses a hydrogenated block copolymer.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art have been considered.

The closest reference is Publication Application US 2005/0171290. Reference discloses a linear A1B1A2 block copolymer wherein B1 is block copolymer having controlled distribution of monovinyl aromatic monomer to conjugated diene. Reference discloses a Young's modulus elongation [0113]. Reference has the same priority date with the same provision application no. 60/355,210. However, there is no double patenting type issue because claims in 20050171290 disclose a process for making a linear A1B1A2 block copolymer.

Terminal Disclaimer

5. The terminal disclaimer filed on November 22 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Application Number 10/359,953 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claims 17-19, 21, 23-25 and 30-32 are deemed to contain allowable subject matter.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Olga Asinovsky
Examiner
Art Unit 1711

O.A.
January 27, 2007


James J. Seidleck
Supervisory Patent Examiner
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